

AN  
INAUGURAL DISSERTATION

ON

*Malaria*

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# Malaria

A knowledge of the theory and source of disease, is not always a necessary qualification, to enable the practitioner of Medicine to arrest its ravages, A Theorist relying upon his theory as the ground, work of his success in practice, will often, find himself surrounded by difficulties from which his fine spun theories cannot give relief, and yet all practitioners of Medicine should by all available means, at their command, search out such truths, as are demonstrable, and which address themselves to the judgments, of

Shall by the summing up  
of a few facts, and deductions  
therefrom endeavor to give  
a reason for the faith that  
is in us;

Malaria, is the well known  
parent of a common class  
of diseases, known, to the  
southern, and south-western  
States of this Confederacy,  
Teaming with their mighty  
rivers, and boasting of their  
mighty Rivers, and beautiful  
Valleys, monumental oaks,  
and majestic Tulips, Here  
in the wide spread valley  
of America's great River  
the mighty Mississippi,  
We annually see a class of

diseases which are a terror  
to mankind. Strange  
that it should be so, strange  
that this fair Eden of the  
world, should have lurking  
within its bosom, a source  
of disease, which is a terror  
to those who may wish to  
feast their eyes and risk  
their fortunes in a land  
seemingly so blessed, by  
Heaven, a land yielding  
annually a richer and more  
abundant harvest, than is  
gathered, in any other Clime.  
Let us now briefly notice a  
few facts having referance  
to the immediate valley of  
the Mississippi River;

It is known that this River annually overflows her banks, and that from fifty to sixty miles of bottom or low lands are submerged beneath, the sweeping flood. These low lands are interspersed, with innumerable Lakes, Ponds, and marshes while the soil is alluvial, containing a very considerable amount of sand. The overflows of this river come at irregular periods, sometimes by the last of February or the first of March and again as late as the last of April or the first of May, and going off by the last march or the first

of April and if late passing  
off not till the last of  
May or the first of June,  
When there is an early  
overflow, it is followed, by  
very little malarial disease,  
But if the overflow occurs  
late in the spring, it will  
be followed by a great excess  
of malarial fevers,  
Take for instance the year  
1850, when the overflow came  
late, and did not pass off  
until the middle of June,  
and we see that there was  
more malarial disease in  
the regions bordering on these  
low lands, than was probably  
ever known either before or

Since, Within fifteen days  
after the overflow had passed  
off whole communities  
were prostrated with the various  
forms of malarial fever  
Take again the year 1854  
when the overflow came early,  
and passed off by the 10<sup>th</sup> of April,  
and, we find this to have been  
the most healthy year known  
to the inhabitants of the great  
valley. From these facts we make  
the following deductions, we have  
said that the overflow in 1850,  
came late in the spring, and  
that within fifteen days after  
the overflow had passed off,  
those persons living adjacent  
to the overflowed lands were

Stricken down with malarial disease, The Lakes, Ponds, & marshes were left, full of the poison, while the soil was perfectly saturated; with the hot sun of June, operating upon the confined or stagnant water, and our opinion is that the water thus confined, and under the influence of a hot sun Malaria was the product of the contact, The malarial poison after being generated was taken up by the gentle winds, and was issued out, to do its works, We have said also, that in the year 1854, The overflow passed off early, and that this was a remarkably

healthy year, in the region  
referred to, so much so that  
Doctors lived hard & did nothing,  
but shrink from the glorious  
prospect of starvation which  
lay before them, We account  
for the healthfulness of this  
year, thus the overflow had  
passed off early, and the hot  
sun of June, July & August  
found no water in the Lakes  
& Ponds and soil to manufa-  
cture malaria from, another  
notable fact in reference  
to the year 1854, was, that  
the month of March had more  
of the winds common to that  
month, it was perfectly  
calm, until about the last

day, when a brisk breeze  
began to blow, & continued  
throughout the month of  
April, March, April and  
May were cold and dry, with  
scarcely any rain at all,  
so that the water which had  
been left in the Lakes,  
Ponds and other low grounds  
had disappeared, while  
that in the soil had either  
evaporated or had receded  
so far into the earth, that  
when the hot sun of summer  
came, it shone upon empty  
reservoirs, and a dry earth,  
Now if the decomposition of  
vegetable matter, is the  
source of malaria why is it?

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That Bilious fever and chills  
and fever prevail so fiercely  
in the months of June,  
July, & August while vegetation  
is in its full vigor,  
The process of decay in vegetation  
commences in September as a  
general rule, and it is an  
undeniable fact that just about,  
the time the putrefactive process  
commences malarial diseases  
begin to subside, If this be true,  
(and we believe it cannot be suc-  
cessfully contradicted) when in  
connection with the facts previ-  
ously stated, where we ask  
are the facts and arguments  
to come from, to revive the  
old Theory? none can be

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found, worthy of a moment's  
consideration, men in their  
advocacy of the old theory  
are conscientious, they have  
heard all their lives that the  
decay vegetable matter was the  
source of malaria, it has become  
with them a fixed opinion  
which we denominate, an old  
prejudice, The people generally  
believe it, and the Doctors wishing  
to dance to the music, cry out,  
These diseases are all caused,  
by the decay of vegetation.  
What if Professor Wood  
of Philadelphia does say  
(on page 239) that all the varieties  
of miasmatic fever occur  
most frequently, and as original

affections, almost exclusively in the latter part of the summer, and in autumn, we of the south & west know, that such is not always the fact, on page 151. Prof Wood says among other things that the circumstances which appear to be essential to the production of miasmata are heat, moisture, and vegetable decomposition" he says further the peculiar morbid effects ascribed to this cause, and by which alone its existence can be recognised, seldom originate at a temperature under 60° F, even though vegetable decomposition may be going on, at 80° continues the Prof they are often very

prevalent and are generally checked by the occurrence of frost, a certain continuance of the heat is not less necessary than a certain degree of it,

Hence says he miasmatic diseases scarcely ever prevail beyond the 56<sup>th</sup> degree of latitude; because though many days in summer, may be very hot, the warm season is short. The nearer we approach to the equator, the more violent, as a general rule do they become, implying a greater intensity of the cause, within the latitudes where there is a regular change of the seasons, they do not commonly make their appearance

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until the middle and often not till the close of summer. Here we have the admission of Prof Wood of the fact that heat is the agent in the production of Malaria, "The nearer we approach to the equator the more violent, as a general rule do they (Malarial fevers) become, implying a greater intensity of the cause," And if the Prof had added a greater amount of the element, he would have come much nearer, a just and rational conclusion, and when he admits as he does that heat & moisture are both necessary, It follows as a matter of course, that the greater the heat, and the more

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abundant the moisture the greater  
the amount of malaria, produced,  
and to prove that the Prof is  
in error, we have only to point  
to the fact, already mentioned,  
that, we have more Remittent  
and intermittent fevers in July  
& August than any months  
in the year, at the very time  
that vegetation is in its most  
flourishing condition, and that  
when the decay of vegetable  
matter does commence, at about  
the same time precisely there  
is a decrease in malarial diseases  
and if this be true and it is  
undeniably so, we claim it to be  
a full and complete, answer to  
all that the professor has said

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regarding vegetable decomposition, and its agency in the production of malaria, In 1848, the difficulties between the United States and Mexico, being amicably adjusted, the American Army took up the line of march for home. It will be remembered that in portions of Mexico, there is what is called the "Rainy Season," which occurs in June, in that portion of country through which the American Army had to pass on its way from the City of Mexico, to Vera-cruz, it was in the months of June and July that the American Army passed through this rainy district, and embarked

at Vera Cruz, Those who embarked  
early in June, were not the  
sufferers, But those who  
embarked during the latter  
part of June, and in July  
were the sufferers, from  
malarial fevers, Within  
a few days after the rain  
had ceased, Malarial disease  
began to develop itself, and  
well it might, for here  
was both moisture and heat  
in abundance, The earth  
was perfectly saturated with  
water, with the solar rays  
of a hot summer sun,  
beaming in its mighty  
force upon the earth,  
Did those rains cause

vegetation to decay, nay  
verily, it received new life,  
from the genial showers,  
and was seen to thrive  
and flourish, giving to the  
Valley and the hill, side,  
a rich green & flowery garb,  
Who does not remember,  
the time that a dam was  
thrown across some neighbour-  
ing stream, for the erection  
of a mill, and that so soon,  
as the piercing rays of a  
summers sun were poured  
out upon the stagnant  
water, the people in the  
vicinity of the dam were  
frustrated with the various  
forms of malarial fever,

not in the decline of  
summer, or the beginning  
of autumn, But in June,  
July, and August, It  
often happens that  
the spring showers will  
tear away these dams and  
the gentle stream flows  
on, The stagnant water  
is all removed and the  
region round about is  
as free from disease  
as the neighbouring  
districts, The draining  
of some highland  
Baron<sup>cy</sup> has been often  
known, to relieve  
a neighbourhood from  
invasions of miasmatic

views, We trust that  
the foregoing facts though  
crudely thrown together,  
when weighed in  
Balance of argument  
are sufficient, to establish,  
the truth of what we  
claim as being the only  
rational theory, in regard  
to the source of Malaria.